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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/028,573	12/19/2001	Eric Klingler	CING-0619/769.US	3290

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EXAMINER	
PYZOCHA, MICHAEL J	

ART UNIT	PAPER NUMBER
2137	

DATE MAILED: 06/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/028,573	KLINGLER ET AL.	
	Examiner	Art Unit	
	Michael Pyzocha	2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 May 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,18-28 and 30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,18-28 and 30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-5, 18-28, and 30 are pending.

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05/08/2006 has been entered.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Park (5689559, Re. 36,919) in view of Eftimakis et al (US 5889781) and further in view of Chien et al (US 20020165972).

As per claim 1, Park discloses processing a message for transmission, wherein the message includes control data and payload data, and wherein the control data is not encrypted and contains a particular control message; detecting the particular control message; initializing the cryptosystem, using the cryptosystem to encrypt the message for transmission; parsing the message for transmission to separate the control data from the payload data; determining whether the control data contains the particular control message; if the control data contains the particular control message (see Park abstract and column 5 lines 39-67).

Park fails to disclose the counter and the use of an encrypted airlink packet for transmission over an airlink.

However, Eftimakis et al teaches a counter (see column 7 lines 3-18) and Chien teaches the use of an encrypted airlink packet (see paragraph 81).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the counter of Eftimakis et al and the airlink packet of Chien in the Park system.

Motivation to do so would have been to locate the synchronization information (see Eftimakis et al column 7 lines 3-18) provide airlink filtering (see Chien paragraph 65).

Eftimakis et al teaches the counter starting at zero and ending at 49, however one of ordinary skill in the art would know a counter can be decremented to obtain the same results.

2. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Park, Eftimakis et al and Chien system as applied to claim 1 above, and further in view of Bender (US 6366779).

As per claim 2, the modified Park, Eftimakis et al and Chien system fails to disclose the control message is a link control channel message.

However, Bender teaches such a message (see column 14 lines 38-62).

At the time of the invention it would have been obvious to a person of ordinary skill in the art for the modified Park, Eftimakis et al and Chien system's control message to be a link control channel message.

Motivation to do so would have been to allow the base station to initiate a call (see column 14 lines 38-62).

3. Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Park, Eftimakis et al and Chien system as applied to claims above, and further in view of Schneier (Applied Cryptography).

As per claim 3, the modified Park, Eftimakis et al and Chien system fails to disclose the use of a state box.

However, Schneier teaches such a state box (see pages 397-398).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use Schneier's state box as the cryptosystem of the modified Malek, Lynn, and Chien system.

Motivation to do so would have been the simplicity of the algorithm (see page 398).

As per claim 5, the modified Park, Eftimakis et al, Chien and Schneier system discloses a RC4 state box and key (see Schneier pages 397-398).

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Park, Eftimakis et al, Chien and Schneier system as applied to claim 3 above, and further in view of Lynn (US 5345508).

As per claim 4, the modified Park, Eftimakis et al, Chien and Schneier system operating on a state box using the altered key, wherein the state box is an array of data (see Schneier pages 397-398) but fails to disclose discloses performing a mathematical operation on the key to alter the key for security, wherein the key is an array of data.

However, Lynn teaches performing a mathematical operation on the key (see Lynn column 2 lines 54-64).

At the time of the invention would have been obvious a person of ordinary skill the art use Lynn's method for initiating an encryption/decryption process in the modified Park, Eftimakis et al, Chien and Schneier system.

Motivation to do so would have been to provide self-synchronization (see Lynn column 2 lines 47-51).

5. Claims 18-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Park, Eftimakis et al, Chien and Schneier system as applied above, and further in view of Dent (US 5060266).

As per claims 18-19, the limitations are substantially the same as claim 1 with the addition of a state box, and are therefore taught as in claim 3, but fail to disclose the use of the ACC level.

However, Dent teaches the use of such level (see column 6 lines 43-60 and column 7 lines 12-31).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to perform the processing of the modified Park, Eftimakis et al, Chien and Schneier system at the ACC level.

Motivation to do so would have been to provide a "blank and burst" mode of operation (see column 7 lines 12-31).

As per claim 20, the modified Park, Eftimakis et al, Chien, Schneier and Dent system discloses sending an encryption key (see Lynn column 2 lines 54-64).

As per claim 21, the modified Park, Eftimakis et al, Chien, Schneier and Dent system discloses changing the encryption key according to a predetermined algorithm (see Lynn column 2 lines 54-64).

As per claim 23, the modified Park, Eftimakis et al, Chien, Schneier and Dent system discloses the method being performed each time the base station participates (see Park column 7 lines 39-67).

As per claim 22, the modified Park, Eftimakis et al, Chien, Schneier and Dent system discloses the method being performed at the associated control channel level (see Dent column 6 lines 43-60 and column 7 lines 12-31).

6. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Park, Eftimakis et al, Chien, Schneier and Dent system as applied to claim 18 above, and further in view of Bender and NetBEUI (webpage).

As per claim 24, the modified Park, Eftimakis et al, Chien, Schneier and Dent system fails to disclose the particular

control message is a link control channel ("LCC") message that is a "set asynchronous balance mode" ("SABM") message and a "set asynchronous balance mode unnumbered acknowledge" ("SABMUA") message.

However, Bender teaches the LCC message (see column 14 lines 38-62) and NetBEUI teaches the SABM message (see page 1).

At the time of the invention it would have been obvious to a person of ordinary skill in the art for the messages of the modified Park, Eftimakis et al, Chien, Schneier and Dent system to be those of Bender and NetBEUI.

Motivation to do so would have been to allow the base station to initiate a call (see Bender column 14 lines 38-62) and to conform to the 802.2 protocol standard (see page 1).

7. Claims 25-27, 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malek, in view of Dent and Park.

As per claim 25, Malek discloses at least one digital signal processing means; at least one central processing means; and encryption synchronization means configured to detect a particular control message in a data transmission, wherein the particular control message is used according to a wireless communication protocol to provide at least one other control function under the wireless communication protocol and, in response, wherein the particular control message occurs just

before the transmission of telephony data (see column 4 lines 47-57).

Malek fails to disclose initiating an encryption/decryption process.

However, Park teaches initiating an encryption/decryption system (see abstract and column 9 lines 39-67).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use Park's method for initiating an encryption/decryption process in Malek.

Motivation to do so would have been to provide copy protection (see Park column 9 lines 39-67).

The modified Malek and Park system fails to disclose the method being performed at the associated control channel level.

However, Dent teaches the use of such level (see column 6 lines 43-60 and column 7 lines 12-31).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to perform the processing of the modified Malek and Park system at the ACC level.

Motivation to do so would have been to provide a "blank and burst" mode of operation (see column 7 lines 12-31).

As per claim 26, the modified Malek, Park and Dent system discloses the encryption synchronization means is further configured to provide a current encryption key to receiving

devices and sending devices in the wireless communication network (see Park column 9 lines 39-67).

As per claim 27, the modified Malek, Park, and Dent system discloses the encryption synchronization means is further configured to count data blocks in a message being transmitted to determine when to begin encryption/decryption (see Park figure 3).

As per claim 30, the modified Malek, Park, and Dent system discloses the initiation of the encryption/decryption process occurs each time a wireless connection is set up, comprising initial connection, connection hand off, and connection reestablishment after unexpected connection loss (see Malek column 4 lines 47-57).

8. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Malek, Park, and Dent system as applied to claim 26 above, and further in view of Schneier (Applied Cryptography).

As per claim 28, the modified Malek, Park and Dent system fails to disclose the use of a state box.

However, Schneier teaches such a state box (see pages 397-398).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use Schneier's state

box as the cryptosystem of the modified Malek, Lynn, and Dent system.

Motivation to do so would have been the simplicity of the algorithm (see page 398).

Response to Arguments

9. Applicant's arguments with respect to claims 1-5, 18-28, and 30 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Pyzocha whose telephone number is (571) 272-3875. The examiner can normally be reached on 7:00am - 4:30pm first Fridays of the bi-week off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MJP

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